

Application Serial No. 09/935,215  
Attorney's Docket No.:06618-881001

Amendments to the Abstract:

Kindly replace the abstract with the following new abstract:

Determining instantaneously the three-dimensional coordinates of large sets of points in space using two or more CCD cameras (or any other type of camera), each with its own lens and pinhole. The CCD's are all arranged so that the pixel arrays are within the same plane. The CCD's are also arranged in a predefined pattern. The combination of the multiple images acquired from the CCD's onto one single image forms a pattern, which is dictated by the predefined arrangement of the CCD's. The size and centroid on the combined image are a direct measure of the depth location Z and in-plane position (X,Y), respectively.